

UNITED STATES DISTRICT COURT
FOR THE
DISTRICT OF VERMONT

JAMES D. SULLIVAN and LESLIE
ADDISON, WILLIAM S. SUMNER, JR.,
RONALD S. HAUSTHOR,
GORDON GARRISON, and TED
and LINDA CRAWFORD,
individually, and on behalf of a
Class of persons similarly situated,
Plaintiffs,

v.

SAINT-GOBAIN PERFORMANCE
PLASTICS CORPORATION,
Defendant.

Civil Action No. 5:16-cv-000125-GWC

**PLAINTIFFS' MEMORANDUM IN SUPPORT OF MOTION FOR CLASS
CERTIFICATION**

INTRODUCTION

The essence of this case is that toxic PFOA pollution released by the Defendant over three decades contaminated the Plaintiffs' properties, wells, and bodies, and the groundwater under their properties, leading to claims for nuisance, trespass, negligence, strict liability, and battery, a claim under Vermont's Groundwater Protection Act, and a claim for the remedy of medical monitoring, among other remedies. The Court should certify the proposed Property Class and Exposure Classes under Fed. R. Civ. P. 23, because Plaintiffs represent ascertainable groups of properties and individuals from a defined geographic area, whose claims arise from the course of conduct of a single polluting Defendant and therefore present a common nucleus of facts and issues under Vermont law.

STATEMENT OF FACTS

A. Background: Defendant's Processes, Pollution, and PFOA Contamination Over Three Decades.¹

In 1968, Chemical Fabrics Corporation (“ChemFab”) commenced manufacturing operations in a former car dealership building at 108 Northside Drive, in Bennington, Vermont. The facility manufactured fiberglass fabrics coated with polytetrafluoroethylene (“PTFE” or “Teflon™”), for diverse industrial applications, and worked with E. I. du Pont de Nemours & Co. (“DuPont”) and Owens-Corning Fiberglas Corporation, to develop a Teflon™-based roofing material that could meet the requirements of U.S. building and fire codes. [Exhibit 1, CHEMFAB: Our First 25 Years (1993)].

When they opened their factory, company officials touted their operations in the local newspaper as pollution-free – promising there would be no industrial wastes, and that any fumes would be odor-free and non-toxic. [Exhibit 2, Bennington Banner Article, 11/23/68]. In 1978, in order to accommodate its growth, ChemFab moved its headquarters, and its five coating towers, from its Northside Drive location to a larger facility at 101 Water Street, in North Bennington. [Ex. 1].

ChemFab’s manufacturing process involved dipping fabric in a water-based coating solution called a dispersion, which contained the PTFE, and surfactants to maintain the PTFE in suspension. This was followed by a series of heating zones, in vertical ovens, to remove the water and to sinter, or fuse, the PTFE onto the fabric. Perfluorooctanoic acid (“PFOA”) was a primary ingredient in the ChemFab/Saint-Gobain dispersion, serving as a surfactant to maintain

¹ The purpose of this section is to provide the Court with background information on the production process used by ChemFab/Saint-Gobain, the emissions of toxic perfluorooctanoic acid (“PFOA”) from the process, and the lack of effective controls for these emissions. Discovery on liability and damages issues has only recently commenced, and Plaintiffs will likely discover additional documents and other information that will be used to prove the claims at issue in the Second Amended Complaint [Doc. 89], which are common liability issues for the class, as discussed below.

the PTFE particles evenly in suspension, such that they would be uniformly distributed onto the fabric. PTFE dispersions contained PFOA in relatively low concentrations, although higher concentrations (up to 100%) of PFOA surfactant could be added to the coating formulation. PFOA was added to the dispersions as ammonium perfluorooctanoate (“APFO”), the ammonium salt of PFOA. [Exhibit 3, Declaration of Phillip K. Hopke, Ph.D., ¶¶ 4 - 6].

As the fabric moved through a series of heating zones, the PFOA was volatilized and emitted from the factory as part of its air discharges. The first heating zone, the so-called drying zone, operated at 200 to 300 °F to remove the water from the wet fabric, and it was during this stage that most of the PFOA was volatilized. This was followed by a 300 to 500 °F baking zone, to melt the PTFE particles onto the fabric, and during this stage the remaining surfactant was volatilized. The final stage was a 600-700 °F sintering (or fusing) zone, which fused the PTFE particles together into a homogenous film on the fibers. These ovens were contained in vertical towers, with the cloth traveling countercurrent to the heated air, which was then exhausted from ChemFab’s towers with the water and PFOA. Through this process of heating the coated fabric, over the course of more than three decades, ChemFab/Saint-Gobain emitted thousands of pounds of PFOA into the atmosphere, soils, and groundwater of Bennington and North Bennington. [Ex. 3, ¶¶ 7, 10 - 11].

PFOA, also known as “C8,” is a man-made, perfluorinated chemical that does not occur naturally in the environment. It is extremely stable and water-repellant, and so was used in a variety of industrial processes and commercial applications. When humans are exposed to PFOA, this toxic chemical binds to plasma proteins in the blood, and is readily absorbed and distributed throughout the body. PFOA is stable to metabolic degradation, has a long half-life in the body, and causes long-term physiologic alterations and damage to the blood, liver, kidneys,

immune system and other organs. Human diseases caused by or associated with exposure to PFOA include: higher total and LDL (“bad”) cholesterol; adversely altered (higher) “liver function” tests; immune suppression; adversely altered and abnormal uric acid; endocrine disruption including but not limited to thyroid abnormalities; urogenital cancers including kidney and testicular cancer; asthma; developmental abnormalities; neurodevelopmental abnormalities including ADHD following in utero exposure; excess ulcerative colitis; prostate cancer; pregnancy induced hypertension. [Exhibit 4, Declaration of Alan Ducatman, M.D., ¶ 1, and Ducatman’s Exhibit 1, pp. 3 - 6; Doc. 91-3, ¶ 11; Exhibit 5, Grandjean, P. and Clapp, R. Perfluorinated Alkyl Substances: Emerging Insights Into Health Risks, *NEW SOLUTIONS: A Journal of Environmental and Occupational Health Policy* 2015, Vol. 25(2) 147–163].

DuPont manufactured much of the PTFE dispersions used by ChemFab/Saint-Gobain, which contained a 3M Company (“3M”) PFOA-based surfactant. Both DuPont and 3M had early knowledge of the toxicity of PFOA. [Ex. 5, pp. 149 - 153]. These companies provided their customers with Material Safety Data Sheets discussing the toxicity of the dispersions and, from time to time, would inform their customers, including ChemFab, of specific toxicological findings.² For instance, in 1970, DuPont published a document entitled “Teflon Fluorocarbon Resins -- Safety in Handling & Use,” warning its customers, including ChemFab, about a condition called “polymer fume fever.” [Exhibit 6]. This occurs in the workplace when PTFE is heated, resulting in flu-like symptoms including chills, backache, fever, and coughing. [Ex. 6, p. 7].

In 1981, based on testing done by 3M, DuPont notified its customers, including ChemFab, that 3M’s PFOA-containing surfactant causes birth defects in rats. As a result,

² Saint-Gobain has designated the Material Safety Data Sheets as “Subject to Protective Order.” When necessary for proof on the merits, Plaintiffs will seek to remove the confidentiality designation for these Data Sheets and other documents pertaining to Saint-Gobain’s knowledge of the toxicity of the materials it purchased.

ChemFab ordered that all female employees of child-bearing age be precluded from operations requiring the handling of PTFE dispersions. [Exhibit 7, Memorandum, Gregory Bischak, ChemFab, to All Employees, with attachments, 4/8/81].³ ChemFab also requested studies of its own workplace exposures. In July of 1982, Harvard's School of Public Health provided ChemFab with the results of its study of workers in the North Bennington facility, addressing concerns about erectile dysfunction and polymer fume fever. [Exhibit 8, Harvard School of Public Health, Health Hazard Evaluation, ChemFab, 7/13/82]. The study found an association between workplace exposure to emissions from the towers and erectile dysfunction and polymer fume fever. [Ex. 8].

Belatedly, after finally receiving toxicological data from PFOA manufacturers, the U.S. Environmental Protection Agency ("EPA") became concerned about the persistence and toxicity of PFOA in in the environment and the human population. 3M stopped manufacturing PFOA in 2000, and stopped using it in 2004; in 2006, DuPont and other PTFE manufacturers agreed to phase out PFOA production and use by 2015. [Ex. 5, p. 148]. In 2009, with the discovery of PFOA contamination in drinking water supplies, the EPA issued a Provisional Health Advisory for PFOA, and in 2016, the Agency issued a long-term exposure Health Advisory. [Exhibit 9, US EPA Drinking Water Health Advisory for Perfluorooctanoic Acid (PFOA) (Executive Summary), May 2016]. Vermont issued its own groundwater limit for PFOA in 2016, setting the limit at 20 parts per trillion ("ppt"). [Exhibit 10, Vermont DEC Groundwater Protection Rule and Strategy (excerpts), 12/16/16].

By the early 1970's, neighbors of Defendant's Northside Drive facility were complaining of noxious and sickening odors, and visible emissions, from the plant's operations. [Exhibit 11, Memorandum, Philip Etter, VT DEC, to Chris Jones, VT DEC, Chronology of Complaints

³ DuPont later retracted this warning after further testing by 3M.

About Odors From Chemical Fabrics, 6/5/97]. In 1975, due to increasing neighbor complaints, as well as a State inspection documenting the plant's visible emissions, in violation of Vermont's air pollution regulations, Vermont's Department of Environmental Conservation ("DEC") cited the company for this regulatory violation, and required it to install pollution control devices, called catalytic "abators" (sometimes, "abaters") on each of the towers at its Northside Drive facility. [Exhibit 12, Vermont DEC, Assurance of Discontinuance, 12/22/75]. Under a claim of economic hardship, Defendant continued to operate its largest tower without an abator, until it relocated and moved all of its towers to the North Bennington facility in 1977. [Exhibit 13, Vermont DEC, Assurance of Discontinuance, 10/31/77].

But neighbor complaints continued and intensified after Defendant moved to its expanded North Bennington facility on Water Street. [Ex. 11]. In addition to requiring the installation of abators on all towers, the State also required the company to build cupolas – or roof structures – to capture and treat any fumes that escaped its furnaces prior to emission. [Ex. 13, at p. 4]. Nevertheless, the company continued to release emissions from the cupolas without treatment. [Exhibit 14, Deposition of Robert Prohaska (excerpts), p. 197].

Despite the additional abators, by June of 1984 odor complaints from neighbors and employees continued to escalate. [Ex. 11; Exhibit 15, Compilation of Representative Odor Complaints to ChemFab and DEC in 1980's]. The State therefore required Defendant to test and characterize its exhaust streams and abatement systems, including emissions from its roof vent. DuPont performed the required testing. Having determined that the roof vent was a major source of odor complaints, DuPont recommended that Defendant duct the roof vent to a new, 25-foot stack, raise the height of several other shorter exhaust stacks, and add equipment to increase the exit velocity of emissions from several of its larger exhaust stacks. [Exhibit 16, Letter, T. Jerry

Linton, DuPont, to L. James Newman, ChemFab, 8/21/84, with attached report]. Although Defendant made these changes, they had little effect on its odor problems or visible emissions. [Ex. 11]. In 1985, Defendant also began an occupational health program to track adverse effects on its employees of exposure to the decomposition products of fluorocarbon polymers. [Exhibit 17, ChemFab, Minutes of “Decomposition Products of Fluoropolymers” Meeting, 7/17/85].

In late 1986, after numerous residents petitioned the North Bennington Zoning Board to declare Defendant’s plant a nuisance, [Ex. 11; Exhibit 18, Letter with Citizen Petition to North Bennington Zoning Board, 7/24/86], DuPont reiterated its recommendations that the company either raise the heights of its remaining stacks, or add additional abatement to remove chemicals prior to emission, noting that raising stack heights was the far less expensive option. [Exhibit 19, Letter, T. Jerry Linton, DuPont, to R.A. Jamke, ChemFab, 12/5/86]. In 1989 and 1990, after additional testing, Defendant raised its remaining stack heights, and modified its stack design to add more dilution air. [Exhibit 20, Memorandum of Telephone Call, Skip Crego, ChemFab, to Chris Jones, DEC, 11/27/89]. These changes did not improve the complaints, including complaints of sickening smoke inside the plant. [Exhibit 21, Compilation of Odor Complaints in 1990’s].

In fact, each of these changes actually increased the distances over which Defendant’s PFOA-laden air emissions traveled on prevailing winds, throughout Bennington and North Bennington. [Ex. 3, at ¶ 13]. Moreover, Defendant’s catalytic abatement system was never intended or designed to remove PFOA. [*Id.*, ¶ 15]. Finally, Defendant failed to maintain its abatement equipment in good working order, resulting in malfunctions and clogging; these maintenance failures reduced what little effectiveness the equipment ever had, resulting in process air emissions that were virtually uncontrolled. [*Id.*, ¶ 16]. And so, complaints about

noxious odors and smoke continued throughout the 1990's, both from employees and from surrounding neighbors. [Ex. 11, Ex. 15; Ex. 21].

In 1996, Defendant sought permission from the DEC to phase out its catalytic abatement system, and to rely instead solely on stack dilution. [Exhibit 22, Letters from Robert Prohaska, ChemFab, with its Proposal to DEC, 1/9/96 and 2/21/96]. The State refused to allow the removal of the catalytic abatement system without local approval, and without follow up testing to confirm that Defendant's emissions would meet Vermont regulations. [Exhibit 23, Letter from Brian Fitzgerald, DEC, to Charles Tilgner, ChemFab, 12/24/96]. Testing in 1998 and 1999 confirmed that Defendant's emissions exceeded Vermont regulations, and odor complaints continued. [Exhibit 24, Letter from Richard Valentinetti, DEC to David Stiles, ChemFab, 5/3/99; Exhibit 25, DEC Memorandum to File from Philip Etter, 9/20/99; Exhibit 26, DEC Memorandum to File from Philip Etter, 11/3/99; Exhibit 27, Letter from Richard Valentinetti, DEC, to David Stiles, ChemFab, 2/17/00; Exhibit 28, DEC Memorandum from Chris Jones to Dick Valentinetti, and Report of Inspection, 5/10/00]. By mid-2000, Defendant understood it was under increasing pressure to control its odors and smoke. [Ex. 28]. Later that year, the State required Defendant to test the efficiency of its catalytic abators. [Exhibit 29, Letter from Richard Valentinetti, DEC to Mark Jaros, ChemFab, 11/1/00]. Although the company balked, it did send two catalysts out for independent testing, which confirmed that neither abator was working properly. [Exhibit 30, Letter from Robert Prohaska, ChemFab to Douglas Elliot, DEC, 12/15/00, with VOC Catalyst Test Report, 12/11/00]. Not surprisingly, complaints continued. [Exhibit 31, Letter from Tyler Perch, to Christian Jones, DEC].

In the summer of 2000, ChemFab and Saint-Gobain announced that Saint-Gobain would acquire ChemFab. In July 2001, Saint-Gobain announced it was closing the plant, and moving

its operations to New Hampshire. In local news interviews, the company cited Vermont's air regulations as one reason for its relocation out of state. [Exhibit 32, Bennington Banner Article, 7/11/01].

B. Discovery of the PFOA Contamination and Delineation of the Zone of Contamination.

In late February 2016, after news broke of PFOA contamination in the public water system in Hoosick Falls, New York, as a result of Saint-Gobain's operations there, Vermont DEC sampled five homes and businesses close to, and in all directions from, Defendant's Water Street plant. [Exhibit 33, Declaration of Richard Spiese, DEC, ¶¶ 5 - 6]. When the results confirmed significant PFOA contamination, the State announced a plan to sample all wells within a 1.5 mile radius of the plant. [*Id.*, ¶ 7]. The State advised those residents with PFOA contamination above 20 ppt not to use their well water for drinking or cooking, and provided bottled water to all impacted properties. [Exhibit 34, State of Vermont v. Saint-Gobain Performance Plastics Corporation, Pleadings by Agreement, ¶ 16, Stipulation for Entry of Consent Order, Appendices A and B, DEC FAQ: Consent Order, 7/26/17].

Within a month, the State's test results confirmed contamination in a significant percentage of wells within the initial 1.5 mile radius, and also confirmed that the contamination likely extended beyond that initial area. [Ex. 33, ¶¶ 7 - 8]. The State obtained Saint-Gobain's agreement to pay for ongoing well testing, and for filtration systems – so-called Point of Entry Treatment systems, or POETs – on all properties with PFOA contamination in excess of the State's interim Health Advisory Limit of 20 parts per trillion.⁴ [Ex. 34, Pleadings by Agreement, ¶ 16]. When those additional test results confirmed more distant PFOA contamination, residents further east of the Water Street facility, and those near the former Northside Drive facility,

⁴ See note 1, *infra*.

requested sampling of their wells. [Ex. 33, ¶¶ 9 - 10] This process of continued testing, and expansion of the testing area based on test results, continued through April of 2017. [*Id.*, ¶¶ 11 - 12]. As of mid-April, 2017, DEC had sampled a total 592 private drinking water wells; of these, 352 are contaminated with PFOA, and 298 exceed 20 ppt, with at least one residential well testing as high as 2,900 ppt. [Ex. 34, Pleadings by Agreement, ¶ 1614; Exhibit 35, DEC Well Testing Results, 12/31/16; Exhibit 43, Declaration of Ronald S. Hausthor, ¶ 4].

This increasingly widened sampling area has been designated by the State as the “PFOA Area of Interest,” on a series of maps starting on March 16, 2016. The boundaries of this area have been most recently delineated as the “sampling boundary,” on a map dated August 24, 2017. [Ex. 33, ¶¶ 7 - 12]. The area extends from the Vermont border with New York on the western side, to the foot of the Green Mountains on the east; the northern boundary runs slightly north of the Shaftsbury town line, and the southern boundary runs south of Vermont Route 9. [*Id.*, ¶¶ 11 - 12].

Plaintiffs have retained an expert hydrogeologist, Donald Siegel, Ph.D., who has reviewed the sampling results as well as the hydrogeological features of the area. He refers to the area within the PFOA Area of Interest sampling boundary as the Zone of Contamination, and states that the boundary reasonably represents that area where groundwater has been contaminated by PFOA from ChemFab/Saint-Gobain’s operations in Bennington and North Bennington. [Exhibit 36, Declaration of Donald I. Siegel, Ph.D., ¶ 8]. The PFOA was deposited throughout the Zone of Contamination by air emissions transported from the ChemFab/Saint-Gobain plants. Plaintiffs have provided an air emissions assessment and air dispersion modeling results and opinions from air pollution experts Phillip Hopke, Ph.D., and Gary Yoder, which show that the interaction of the PFOA emissions with the winds and terrain would have

deposited PFOA throughout the Zone of Contamination. [Ex. 3; Exhibit 37, Declaration of Gary Yoder]. Dr. Siegel confirms ChemFab/Saint-Gobain as the source of the contamination, by comparing the actual groundwater monitoring results to the predicted groundwater contamination from the air modeling of PFOA emissions from the plants. [Ex. 36, ¶¶ 8 - 10]. The Zone of Contamination includes approximately 2,150 Bennington and North Bennington residential properties lying above the Zone, with approximately 8,342 residents within the Zone. [Exhibit 38, Declaration of Robert Unsworth, and Unsworth Exhibit 1, p. 7].⁵

In July 2017, the State and Saint-Gobain reached an agreement on a consent order to address PFOA contamination in portions of Bennington and North Bennington. [Ex. 34]. The agreement includes extensions of municipal water lines to homes in most, but not all, of the western portion of the Zone of Contamination; for those homes where a municipal water line extension is not feasible, Saint-Gobain will either drill a replacement well if feasible, or operate and maintain a POET. [*Id.*, Appendix A, FAQ: Consent Order]. Construction for the water line extensions is expected to begin in 2017. [*Id.*]. This consent order does not address remediation in the eastern portion of the Zone of Contamination, as Saint-Gobain is still disputing responsibility for the contamination in this area. [*Id.*, Appendix B, FAQ: Consent Order]

C. Blood Levels of PFOA in Residents in the Zone of Contamination.

In April 2016, as a consequence of high PFOA levels in domestic wells, the Vermont Department of Health (DOH), in conjunction with the Centers for Disease Control (CDC), began to test the blood of those area residents who consumed contaminated water, or who worked at the

⁵ Dr. Siegel has reviewed Saint-Gobain's claim that there were other sources of the PFOA in the eastern portion of the Zone of Contamination, including, in particular, the old Bennington Landfill. In his opinion, there are no other potential sources, other than Defendant's air emissions, that credibly account for the patterns and levels of PFOA contamination throughout the Zone. He also has determined that the PFOA contamination of the groundwater will persist at least for decades, to more than a century, making it permanent for all intents and purposes. [Ex. 36, ¶¶ 11 - 16].

plant.⁶ The results of this blood testing has shown serum concentrations of PFOA as high as 1125.6 micrograms per liter (“µg/l”), and a geometric mean concentration of 10 µg/l, about five times higher than 2.1 µg/l, the average concentration among Americans. [Exhibit 39, DOH’s PFOA Blood Testing and Exposure Assessment, Summary of Results, 1/26/17, Slide 5]. DOH has also found that PFOA levels in blood are “strongly correlated” with PFOA levels in well water, and that cumulative exposure to PFOA in water also was “strongly correlated” with PFOA levels in blood. [*Id.*, Slide 8]. As of January 26, 2017, DOH had tested the blood of 472 Bennington and North Bennington residents in its analysis of PFOA contamination. [*Id.*, Slide 4]. The average blood serum PFOA level in these residents was 10.1 µg/l. [*Id.*]. Of these, 267 persons tested at a blood serum PFOA levels between 6.7 µg/l to 1125.6 µg/l. [*Id.*]. In addition, 210 persons tested at a blood PFOA levels between 0.3 µg/l to 6.7 µg/l. [*Id.*].

D. Remedies and Damages.

Plaintiffs are seeking medical monitoring as a class-wide remedy in this case for the Exposure Class and have retained Alan Ducatman, M.D., an expert in the risks, medical effects, and health effects of exposure to PFOA, regarding the design and implementation of a clinically-appropriate program of medical monitoring for those residents within the Zone who have been exposed to PFOA in their drinking water and who have higher than background levels of PFOA in their blood serum. Dr. Ducatman has significant and direct experience in the evaluation and medical monitoring of PFOA, having provided advice to the leaders of the C8 Health Project regarding the risks of PFOA exposure in the mid-Ohio Valley. Dr. Ducatman testifies in his Declarations and Report that those residents in the Zone of Contamination who ingested PFOA

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<http://healthvermont.gov/sites/default/files/documents/2016/11/Health%20Department%20Announces%20PFOA%20Blood%20Test%20Results.pdf>.
http://healthvermont.gov/sites/default/files/documents/2017/01/NEWS_PFOA%20Blood%20Test%20%26%20Exposure%20Assessment%20Results.pdf.

in their drinking water, and who have elevated levels of PFOA in their blood serum, should participate in a medical monitoring program to monitor for these known health effects, in order to identify and treat them at the earliest point in time, in order to minimize disease and improve health outcomes. [Ex. 4, and Ducatman Exhibit 1, at pp. 6 – 10; Doc. 91-3, ¶¶ 5, 12 - 13].

Finally, Plaintiffs are seeking a class-wide remedy for those Property Class members in the Zone of Contamination for the economic damages resulting from Defendant's PFOA contamination, and in particular for the unreasonable harm to the groundwater underlying the Zone of Contamination, pursuant to 10 V.S.A. § 1410(c). Robert Unsworth, an environmental and natural resource economist, testifies that, while the primary costs of extending public water to residents on the western side of the Zone of Contamination will be borne by Defendant through the recent Consent Order, residents will now bear added costs of quarterly water bills, while those not yet able to access town water will have to rely on Point of Entry Treatment Systems ("POETS"). [Ex. 38, and Unsworth Ex. 1, pp. 1 – 2, 4 - 8].

Mr. Unsworth has also provided the methodologies for assessing the economic damages resulting from the loss of the source of clean groundwater, leaving these communities reliant on the existing municipal water systems and their associated water sources. While in this case the groundwater cannot be replaced *in situ*, Mr. Unsworth has opined that actions can and should be taken to replace the full range of services provided by this resource, in order to return the community to the conditions that would have existed absent the contamination. He has provided methodologies for assessing the costs of such actions on a class-wide basis, including the costs to: (1) assure the quality of municipal water is maintained given additional demands on these systems; (2) assure the capacity of these systems meets the added demand for water; and (3)

assure that the remaining sources of water are protected and enhanced to off-set the loss of the community's groundwater resources. [*Id.*, and Unsworth Ex. 1, pp. 1 – 2, 8 - 11].

E. The Plaintiffs.

Plaintiffs and Members of the proposed Class are all residents of North Bennington and Bennington who have interests in properties located within this Zone of Contamination, above the groundwater aquifer contaminated with PFOA. Plaintiffs James D. Sullivan and Leslie Addison's private drinking water well is contaminated with PFOA at 470 ppt. [Exhibit 40, Declaration of James D. Sullivan, ¶ 4; Exhibit 41, Declaration of Leslie Addison, ¶ 4]. Plaintiff William S. Sumner, Jr.'s private drinking water well is contaminated with PFOA at 890 ppt. [Exhibit 42, Declaration of William S. Sumner, Jr., ¶ 5]. Plaintiff Ronald S. Hausthor's private drinking well is contaminated with PFOA at 2,900 ppt. [Exhibit 43, Declaration of Ronald S. Hausthor, at ¶ 4]. Plaintiffs Theodore and Linda Crawford's private drinking well has tested either "nondetect" for PFOA, or below the VHA limit of 20 ppt. [Exhibit 45, Declaration of Ted Crawford, ¶ 4; Exhibit 46, Declaration of Linda Crawford, ¶ 4]. Plaintiff Gordon Garrison receives his drinking and domestic water from the Town of Bennington's municipal water supply. [Exhibit 44, Declaration of Gordon Garrison, ¶ 4]. In addition, with this Motion for Class Certification, Plaintiffs are also moving to amend their Second Amended Complaint, to add an additional Class Representative, Billy J. Knight, who owns property on the eastern side of the Zone of Contamination. Mr. Knight's private drinking water well is contaminated with PFOA at 105 ppt. [Exhibit 47, Declaration of Billy J. Knight, ¶ 4].

As a result of their properties' location within the Zone of Contamination, and as a result of the contamination of their groundwater, property and soils with PFOA, all Plaintiffs and Class Members have suffered property damage, diminution of property value, loss of use and

enjoyment, annoyance, upset, aggravation and inconvenience. [Ex. 40, ¶ 9; Ex. 41, ¶ 9; Ex. 42, ¶ 10; Ex. 43, ¶ 9; Ex. 44, ¶ 6; Ex. 45, ¶ 6; Ex. 46, ¶ 9; Ex. 47, ¶ 9].

Moreover, all Plaintiffs and Class Members within the Zone of Contamination reside above a groundwater aquifer that is, for all intents and purposes, permanently contaminated with PFOA. [Ex. 36, ¶ 16]. Under Vermont law, “all persons have a right to the beneficial use and enjoyment of groundwater free from unreasonable interference by other persons.” [Doc. 89, ¶ 116 (citing 14 V.S.A. § 1410(a)(4))]. Saint-Gobain’s contamination of the groundwater within the Zone of Contamination constitutes unreasonable harm through the alteration of the character or quality of the groundwater. [*Id.*, ¶ 117]. All Plaintiffs and Class Members have suffered such unreasonable harm to their groundwater, entitling them to equitable relief and damages. [*Id.*, ¶¶ 118 – 119].

Finally, in addition to the property and groundwater damages set forth above, those Plaintiffs and Class Members who have consumed PFOA in their drinking water -- the “Exposure Class” -- have suffered not only the contamination of their properties, soils, and private drinking water wells, but also contamination of their persons, from Saint-Gobain’s improper use, handling, discharge, and release of PFOA. [*Id.*, ¶ 76].

STANDARD OF REVIEW

In the Second Circuit, Rule 23 is liberally interpreted. *Marisol A. v. Giuliani*, 126 F. 3d 373, 377 (2d Cir. 1997). The Court should perform a rigorous analysis of whether Plaintiffs have established all of the elements required by Rule 23. *Allen v. Dairy Farmers of America, Inc.*, 279 F.R.D. 257, 262 (D. Vt. 2011), *citing In re Initial Pub. Offerings Secs. Litig.*, 471 F. 3d 24, 33, 42 (2d Cir. 2006). District court decisions that grant class certification receive greater

deference than decisions that decline to certify a class. *Johnson v. Nextel Communications, Inc.*, 780 F.3d 128, 137 (2d Cir. 2015).

ARGUMENT

I. THE PROPOSED PROPERTY CLASS SHOULD BE CERTIFIED, BECAUSE ITS CLAIMS ARISE FROM A COMMON NUCLEUS OF OPERATIVE FACTS AND LAW, AND COMMON ISSUES PREDOMINATE.

The proposed Property Class meets all of the requirements for certification under Rule 23.

A. The Property Class Is Ascertainable and So Numerous That Joinder is Impracticable, Satisfying Rule 23(a)(1).

In response to the discovery of PFOA contamination in wells adjacent to the Defendant's former plant on Water Street in Bennington, the Vermont DEC has defined an Area of Interest, or Zone of Contamination, based on an extensive process of sampling wells throughout Bennington and North Bennington. [Ex. 33, ¶¶ 6 - 12]. Essentially, the DEC first established a radius of 1.5 miles around Defendant's former facility, and then, over weeks and months, sampled further in multiple directions until the wells showed no detections of PFOA. [*Id.*, ¶¶ 7 – 9]. Plaintiffs' expert hydrologist, Dr. Siegel, has concluded that the latest boundaries set by the DEC reasonably represent the area where groundwater has been contaminated with PFOA from Defendant's operations. [Ex. 36, ¶ 8]. There is no credible evidence of any other source of the PFOA pollution in the Zone of Contamination. [*Id.*, ¶ 11].

DEC's current map of the Area of Interest may be overlaid onto parcel maps to determine the properties that are within this Zone of Contamination. [Ex. 33, ¶ 12]. Plaintiffs have determined that the Zone of Contamination contains approximately 2,150 properties, and approximately 8,342 residents. [Ex. 38, and Unsworth Ex. 1, p. 7].

This number of affected properties and property owners plainly is so numerous as to make joinder impracticable. Joinder is presumed to be impracticable when a putative class exceeds 40 members, and this Court has certified classes with fewer numbers than the proposed Property Class. *Allen v. Dairy Farmers of America, Inc.*, No. 5:09-cv-230, 2012 WL 5844871, at * 3 (D. Vt. Nov. 19, 2012); *Allen.*, 279 F.R.D. at 263; *Ouellette v. International Paper Co.*, 86 F.R.D. 476, 479 (D. Vt. 1980) (certifying a class of approximately 400 property owners); *Ouellette v. International Paper Co.*, No. 78-163, at 2-3 (D. Vt. October 29, 1982) (certifying class of approximately 162 members) [Doc. 93-3].

B. There Are Questions of Law or Fact Common to the Class, Satisfying Rule 23(a)(2).

The elements of the Plaintiffs' claims are familiar under Vermont law. Nuisance is an interference with the use and enjoyment of another's property that is both unreasonable and substantial. *Myrick v. Peak Electric Co.*, 2017 VT 4, ¶4. Trespass is an invasion of the Plaintiffs' interests in the exclusive possession of their land. *John Larkin, Inc., v. Marceau*, 2008 VT 61, ¶8. Negligence requires a duty from the Defendant to the Plaintiffs, a breach of that duty, injury, and a causal link between the breach and the injury. *Demag v. Better Power Equipment, Inc.*, 2014 VT 78, ¶6. Strict liability flows from the Defendant engagement in ultra-hazardous or abnormally dangerous activities. *Malloy v. Lane Construction Corp.*, 123 Vt. 500, 503-04 (1963). Liability under the Groundwater Protection Act arises from the Defendant's unreasonable harm in altering the character or quality of groundwater. 10 V.S.A. §1410(c).

Common questions exist when "the same conduct or practice by the same defendant gives rise to the same kind of claims from all class members...." *Johnson v. Nextel Communications, Inc.*, 780 F. 3d 128, 137-38 (2d Cir. 2015). Thus, all of the Plaintiffs' claims and their elements raise common questions of fact and law, because all arise from the

Defendant's course of conduct over 30-plus years of polluting the Zone of Contamination with PFOA, thereby contaminating the Plaintiffs' properties and wells, and the groundwater under their properties. These common questions include:

1. Whether the Defendant's PFOA pollution and discharge created a nuisance to Plaintiffs and the Property Class by interfering with their use and enjoyment of their property;
2. Whether this nuisance was unreasonable and substantial;
3. Whether the Defendant's PFOA pollution and discharge invaded the interests of the Plaintiffs and the proposed Property Class in the exclusive possession of their property;
4. Whether the Defendant owed Plaintiffs a duty to avoid contaminating their properties, wells, and bodies with PFOA;
5. Whether the Defendant breached this duty;
6. Whether this breach caused the Plaintiffs injury;
7. Whether the Defendant engaged in an abnormally dangerous or ultra-hazardous activity;
8. Whether the Defendant caused unreasonable harm to the groundwater under the Zone of Contamination;
9. The amount of natural resource damages for this unreasonable harm to the groundwater;
10. Whether the Defendant acted intentionally under the law of battery;
11. Whether the Defendant's intentional acts resulted in harmful or offensive contact to the Plaintiffs and the members of the Exposure Class;
12. Whether the Plaintiffs and the members of the Exposure Class were exposed to the Defendant's PFOA;
13. Whether this exposure caused increased risks of injury or disease;
14. Whether there is a medical monitoring program for these increased risks that differs from that provided to anyone who sees a doctor regularly, and
15. Whether this medical monitoring program is useful for early identification of injury associated with the exposure.

In this case, as in many prior cases of chemical and toxic contamination, these common questions of fact and law more than meet the commonality requirement. *Mejdrech v. Met-Coil Systems, Corp.*, 319 F. 3d 910, 911 (7th Cir. 2003) (claims that TCE contaminated plaintiffs' soil and the groundwater under their homes raised common questions); *Sterling v. Velsicol Chemical Co.*, 855 F. 2d 1188, 1197 (6th Cir. 1988) (contamination of groundwater with hazardous chemical wastes); *Stepp v. Monsanto Research Corp.*, No. 3:19cv468, 2012 WL 604328 (S.D. Oh. Feb. 24, 2012) (contamination from radioactivity and other hazardous wastes); *Collins v. Olin Corp.*, 248 F.R.D. 95, 101 (D. Conn. 2008) (contamination from lead and arsenic); *Cook v.*

Rockwell Intern. Corp., 151 F.R.D. 378, 385 (D. Colo. 1983) (contamination from radioactivity and other substances); *Boggs v. Divested Atomic Corp.*, 141 F.R.D. 58, 64 (S.D. Oh. 1991) (contamination from radioactive and other hazardous wastes); *Ouellette*, 86 F.R.D. at 479 (contamination from noxious odors and wastewater from paper processing).

C. The Claims of the Representative Parties Are Typical, Satisfying Rule 23(a)(3).

Typicality is satisfied when class members' claims arise from the same course of events and reflect the same legal theories. *Allen*, 2012 WL 5844871, at * 4; *Allen*, 279 F.R.D. at 272. When the same unlawful conduct affects the named Plaintiffs and the class, typicality is met irrespective of minor variations. *Allen*, 2012 WL 5844871, at *4; *see also*, *Ouellette*, 86 F.R.D. at 480 (typicality evaluated in terms of the claims as to liability).

These Plaintiffs are typical because they all own property in the Zone of Contamination which has been contaminated by the Defendant's PFOA, Plaintiffs Sullivan, Addison, Sumner, and Hausthor have wells that have been contaminated with the Defendant's PFOA. The Plaintiffs' claims are typical because their claims and those of the class arise from the same course of events and are based on the same legal theories.

D. The Representative Parties Will Fairly and Adequately Protect the Interests of the Class, Satisfying Rule 23(a)(4).

The adequacy requirement tends to merge with the commonality and typicality criteria, and generally is met if there is an absence of conflict between the representatives and the class, and if there is assurance of vigorous prosecution. *Allen*, 2012 WL 5844871, at *5; *Allen*, 279 F.R.D. at 272.

Again, the Plaintiffs easily meet these requirements. There are no conflicts between the representatives and other class members, and the Plaintiffs vigorously have prosecuted this case, with qualified counsel, and will continue to do so. [Ex. 40, ¶¶ 10 - 16; Ex. 41, ¶¶ 10 - 16; Ex.

42, ¶¶ 11 - 17; Ex. 43, ¶¶ 10 - 16; Ex. 44, ¶¶ 7 - 13; Ex. 45, ¶¶ 7 - 13; Ex. 46, ¶¶ 10 - 16; Ex. 47, ¶¶ 10 - 16]. The named Plaintiffs should be appointed as class representatives, and the undersigned should be appointed as class counsel.

E. Common Questions of Law or Fact Predominate Under Rule 23(b)(3).

The fundamental test for predominance is whether a common nucleus of operative facts and issues underpins the claims of the proposed class. *Allen*, 2012 WL 5844871, at *9, citing *In re Nassau County Strip Search Cases*, 461 F. 3d 219, 228 (2d Cir. 2006); accord, *Johnson*, 780 F. 3d at 139 (predominance exists where liability issues subject to common proof are more substantial than issues subject to individualized proof, such as damages). From the standpoint of consistency and convenience, it is desirable to “develop in a single proceeding the quantum, quality and dispersion pattern of [the Defendant’s] discharges.” *Ouellette*, 86 F.R.D. at 481. Core questions of whether and to what extent the Defendant caused the PFOA contamination predominate because “it makes good sense, especially when the class is large, to resolve those issues in one fell swoop while leaving the remaining, claimant-specific issues to individual follow-on proceedings”. *Mejdrech*, 319 F. 3d at 911. Accordingly, certification is granted where there is cohesiveness of the class due to a “shared experience that is confined in time and place and produces similar effects.” *Collins*, 248 F.R.D. at 102.

The proposed Property Class meets every test for predominance of common claims. The Defendant’s contamination of the class members’ properties, wells, and underlying groundwater constitutes the common nucleus of operative facts that underpins their claims, and Plaintiffs will present common proof of these facts. [Ex. 3; Ex. 33; Ex. 36; Ex. 37]. Moreover, all of Plaintiffs’ claims arise under Vermont law. Here, as in *Ouellette*, it is desirable to develop the quantum, quality, and dispersion of the Defendant’s PFOA pollution in a single proceeding, rather than re-

trying that central issue multiple times. Like *Mejdrech*, the “core questions” are whether and to what extent Defendant caused this PFOA contamination. As in *Collins*, these Plaintiffs and all class are cohesive because they share the common experiences of Defendant’s PFOA contamination of their properties that occurred from 1968-2001, and that produced similar effects on all properties within the Zone of Contamination.

In *Ouellette*, this Court found predominance where a geographically discrete group of property owners asserted consistent claims which relied on identical evidence to prove the defendant’s pollution and its effects on their properties. 86 F.R.D. at 482-83. The same predominance exists in this case. Here, as in *Collins*, the common issues of Defendant’s course of conduct, and its legal effect on the Property Class, predominate over any individual issues. 248 F.R.D. at 103; *accord Mejdrech*, 319 F. 3d at 911-12 (common issues of whether and to what extent the defendant contaminated the plaintiffs’ properties predominated where the class members’ properties occupied a contiguous area with precise boundaries and all claims involved the same law); *Stepp*, 2012 WL 604328, at *8 (common issues in proving liability for nuisance from release of radiation and other hazardous wastes from defendant’s facility outweighed individualized damage issues); *Turner v. Murphy Oil USA, Inc.* 234 F.R.D. 597, 607-09 (E.D. La 2006) (common questions predominated in nuisance, negligence, and strict liability claims arising from an oil spill from the defendant’s facility); *Muniz v. Rexnord Corp.*, No. 04 C 2405, 2005 WL 1243428, at *4 (N.D. Ill. Feb. 10, 2005) (common nucleus of facts concerning the defendant’s course of conduct in disposing of hazardous chemicals predominated over individualized questions); *Cook*, 151 F.R.D. at (common issues of liability represented the core of plaintiffs’ action); *Boggs*, 141 F.R.D. at 67 (common issues of liability, causation and remedies predominated); *see also Gintis v. Bouchard Transport.*, 596 F.3d 64, 66-67 (1st Cir.

2010) (Souter, J., sitting by designation, reversed denial of class certification in an oil spill contaminating 90 miles of shoreline finding that substantial and serious common issues of liability would arise over and over in potential individual cases).

As it has throughout this case, Defendant can be expected to cite *Rowe v. E.I. DuPont de Nemours and Co.*, 262 F.R.D. 451 (D. N.J. 2009), a case involving PFOA contamination and reflecting hostility to class certification. Nevertheless, even *Rowe* found that common issues predominated with respect to the plaintiffs' claims for nuisance. 262 F.R.D. at 459-462. Moreover, although *Rowe* denied class treatment of the plaintiffs' claims for trespass, negligence, and strict liability, that holding is of little relevance because, in contrast to *Rowe*, the evidence and expert testimony before this Court in this case demonstrate common proof of the Defendant's releases of PFOA, the invasion of that PFOA onto the properties within the Zone of Contamination, and from there into the groundwater, and Defendant's course of conduct over decades of continued pollution despite hundreds of complaints from neighboring property owners. This Court's decisions in *Ouellette* are far more controlling, relevant, and persuasive than the decisions of the New Jersey court in *Rowe*.⁷

The Court should find that common questions predominate because the claims of the Property Class rest on a common nucleus of operative facts and issues to establish the Defendant's liability for nuisance, trespass, negligence, strict liability, and violation of Vermont's Groundwater Protection Act.

F. A Class Action Is Superior to Other Methods For Fairly and Adequately Adjudicating The Claims of the Property Class.

All four factors in Rule 23(b)(3)(A)-(D) indicate that a class action is superior to other methods for fairly and efficiently adjudicating the claims of the proposed Property Class. As in

⁷ Ultimately, the *Rowe* court also approved a class settlement pursuant to Fed. R. Civ. Pro. 23(e). *Rowe v. E.I. DuPont de Nemours and Co.*, Nos. 06-1810 and 06-3080, 2011 WL 3837106 (D. N.J. August 26, 2011).

Allen, there is no evidence that any putative class member would prefer a separate lawsuit, and, indeed, the absence of such a lawsuit demonstrates the superiority, and cost efficiency, of the proposed class action. *Id.*, 2012 WL 5844871, at *16. Likewise, this proposed class action is the only private litigation that has been filed as a result of Defendant's PFOA contamination, which demonstrates the desirability of concentrating the claims before this Court. Finally, a class action is the most fair and efficient vehicle for presentation of Plaintiffs' claims because of the complex nature of the case, the breadth of Plaintiffs' allegations, the volume of evidence and witnesses, the need for expert testimony in specialized areas, and the sheer number of participants. *Id.*; *Ouellette*, 86 F.R.D. at 483. Accordingly, the Plaintiffs have established the superiority of the Property Class under Rule 23(b)(3).

G. The Common Questions Presented on the Issue of Groundwater Damages Reinforce the Predominance of Common Issues for the Property Class.

This Court extensively analyzed the history, purpose and scope of Vermont's Groundwater Protection Act ("GPA"), 10 V.S.A. §§ 1390 – 1419, and concluded that "[a]ny person may maintain under this section an action for equitable relief or an action in tort to recover damages, or both, for the unreasonable harm caused by another person withdrawing, diverting or altering the character or quality of groundwater." [Doc. 74, at 13 (quoting the GPA)]. This Court also stressed that this cause of action is distinct from common law claims: "The existing theories of negligence, nuisance, strict liability and intentional harm are preserved and augmented by a new right to seek damages for 'unreasonable harm' caused by a person who alters the character and quality of groundwater." *Id.* This Court further held that "'Unreasonable harm' is a broad term which encompasses damage to the water supply itself and also to the health of those who drink from it." *Id.*, at 9. Finally, this Court noted that, in contrast to agricultural contamination under subsection 1410(d), claims against defendants not involved in

agriculture brought under Section 1410(c) do not require evidence of negligence, recklessness, or intentional conduct. *Id.*

Accordingly, Plaintiffs' Second Amended Complaint Plaintiffs included a claim for Defendant's violation of the GPA. [Doc. 89, Count 6]. Because groundwater is held in trust for the public, 10 V.S.A. §1390(5), this claim inherently presents the common issue of "damage to the water supply itself." *Id.* Moreover, as outlined in the declaration and report of Robert E. Unsworth, Plaintiffs' evidence of damages under the GPA raises common issues of fact and law.⁸

Mr. Unsworth is an expert in the assessment of natural resources damages that result from loss or adverse impacts to resources such as groundwater. The principal goal of natural resources damages assessment is to quantify the cost of actions that restore, replace or acquire the equivalent of the natural resources injured from of the release of hazardous substances or other adverse events. [Ex. 38, and Unsworth Ex. 1, pp. 2 – 3, 10 - 11]. In this case, natural resources damages mean restoring or replacing the services of the PFOA-contaminated groundwater of Bennington and North Bennington, a community resource that has been lost forever. [*Id.*; Ex. 36, ¶ 16]. Natural resource damages for this contaminated groundwater include compensatory restoration damages, or "replacement costs," and direct restoration damages, or "added costs." [Ex. 38, and Unsworth Ex. 1, pp. 2 – 3, 8 – 11].

Compensatory restoration is intended to make the public whole for the loss of natural resource services. Notwithstanding the promised extension of municipal water to some affected residents, the community as a whole has lost the aquifer underlying the Zone of Contamination, a

⁸ Mr. Unsworth is a Principal and Director at Industrial Economics, Inc., a 120-person economics and environmental policy consulting firm, who has provided natural resources damage assessments for the U.S. Department of Justice, the National Oceanic and Atmospheric Administration, the U.S. Department of the Interior, the U.S. Environmental Protection Agency, other federal agencies, various U.S. states, tribal governments, and non-governmental organizations, private companies and private law firms.

formerly clean and reliable water resource. While this contaminated groundwater itself cannot be restored, other actions can be taken to replace restore, as much as possible, the full range of services provided by this resource, to replicate, as much as possible, the conditions that would have existed absent the Defendant's contamination. [*Id.*, and Unsworth Ex. 1, pp. 8 - 11].

Such restorative actions may include assuring (1) the quality of the municipal water systems is maintained; (2) the capacity of these systems meets the added demand for water, now and in the future; and (3) the remaining sources of water are protected and enhanced, because the groundwater resource no longer is available. [*Id.*, and Unsworth Ex. 1, pp. 10 - 11]. This compensatory restoration, as outlined by Mr. Unsworth, is a widely-accepted as a measure of environmental damage. [*Id.*, and Unsworth Ex. 1, p. 8].

Direct restoration assesses the cost to users of the resource from its loss, and involves an examination of the added costs to those harmed by this loss. Direct restoration also is widely accepted as an appropriate measure of environmental damage. [*Id.*, and Unsworth Ex. 1, p. 10].

Here, these direct restoration costs are impacted by the measures taken recently by the State of Vermont, in its continuing effort to protect public health. In late July 2017, after more than a year of investigations and mandated interim remedial measures (including the provision of bottled water to, and the installation of filtration systems in, homes with contaminated wells), the State, having determined that Saint-Gobain is liable for the PFOA contamination in the aquifer underlying Bennington and North Bennington, entered into a partial Consent Order that requires Saint-Gobain to pay to connect approximately 200 residences to uncontaminated municipal water systems. These residences all are in the western section of the Zone of Contamination; no agreement has been reached concerning the eastern section of the Zone. [Ex. 34].

The properties connected to municipal water systems will experience new, additional and uncompensated costs, primarily quarterly water bills. Residents who do not receive hook-ups to municipal water will incur the inconvenience, costs and uncertainty of managing POET systems to filter the groundwater they use. [Ex. 38, and Unsworth Ex. 1, pp. 7 - 8].

These restoration damages measures represent group, rather than individualized remedies. Specifically, the methodology for assessing compensatory restoration includes only group-wide determinations, and requires no individualized analyses.⁹ [*Id.*, and Unsworth Ex. 1, pp. 11 - 12]. Likewise, accepted methodology for assessing direct restoration damages also relies upon group-wide determinations, and employs no individualized analyses.¹⁰ [*Id.*, and Unsworth Ex. 1, pp. 8 – 10, 11 - 12].

Thus, common issues predominate in the assessment of these natural resource damages under the GPA, including both the compensatory restoration and direct restoration costs. These damages appropriately compensate for the loss of the groundwater resource through group-oriented remedies. The calculations to be performed, assumptions made, and information relied upon are common to all of the Plaintiffs in this matter. [Ex. 38, and Unsworth Ex. 1]. Given the similarities in the losses suffered by property owners and by the community in the Zone of Contamination, natural resource damages under the GPA should be assessed on a class-wide basis.

II. THE EXPOSURE CLASS ALSO SHOULD BE CERTIFIED BECAUSE COMMON ISSUES PREDOMINATE.

A. The Exposure Class Is Ascertainable and Numerous, Satisfying Rule 23(a)(1).

⁹ Since compensatory restoration damages are, in effect, designed to preserve and protect the groundwater, the public resource unreasonably harmed by Defendant's wrongful conduct, Plaintiffs anticipate that such damages will be placed into a trust, whose funds will be used to protect and enhance the public's reliance on the only two remaining municipal water sources.

¹⁰ Although Plaintiffs maintain that primary or direct restoration damages are properly assessed as part of their GPA claims, in the alternative, these also could be considered part of the damages under Plaintiffs' tort theories, which also are provable on a common basis. *See* Section I.B., *infra*.

The Exposure Class includes all persons who have resided in the Zone of Contamination, have ingested PFOA-contaminated water, and have an above-background level of PFOA in their blood. [Doc 89, ¶ 76]. The average background blood PFOA level in the U.S. is 2.1 micrograms per liter (“µg/l”). [Ex. 39, Slide 5].

As of January 26, 2017, the Vermont DOH had tested the blood of 472 Bennington and North Bennington residents in its analysis of PFOA contamination. [*Id.*, Slide 4]. Plaintiff’s counsel represent many of these people, and the remainder are ascertainable and amenable to appropriate notice under Rule 23(c)(2). Of these, 267 persons tested at a blood serum PFOA level between 6.7 µg/l to 1125.6 µg/l. [*Id.*]. In addition, 210 persons tested at a blood PFOA level between 0.3 µg/l to 6.7 µg/l, further augmenting the number of persons with blood PFOA levels above 2.1 µg/l. The average blood serum PFOA level in these residents was 10.1 µg/l. The Vermont DOH found that PFOA concentrations in water were “strongly correlated” with PFOA levels in blood serum and that cumulative exposure to PFOA in water also was “strongly correlated” with PFOA levels in blood. [*Id.*, Slide 8].

This evidence demonstrates that the Exposure Class is readily ascertainable and sufficiently numerous for certification of a class. *Allen*, 2012 WL 5844871, at * 3; *Allen*, 279 F.R.D. at 263; *Ouellette*, 86 F.R.D. at 479; *Ouellette*, No. 78-163, at 2-3.

B. The Representative Plaintiffs Are Typical of this Class and Will Fairly and Adequately Represent the Interests of this Class, Satisfying Rule 23(a)(2) and (3).

The Representative Plaintiffs Sullivan, Addison, Sumner, and Haushor all reside in the Zone of Contamination, all consumed contaminated water, and all have above-background levels of PFOA in their blood. The Representative Plaintiffs’ blood PFOA levels are 24.8 µg/l, 40.9 µg/l, 305.1 µg/l, and 204.1 µg/l, respectively. [Ex. 40, ¶ 5; Ex. 41, ¶ 5; Ex. 42, ¶ 6; Ex. 43, ¶ 5].

Proposed additional Representative Plaintiff Billy J. Knight's blood PFOA level is 38.3 µ/l. [Ex. 47, ¶ 5]. Thus, the Representative Plaintiffs are typical of the Exposure Class and will fairly and adequately represent the interests of this class.¹¹

C. The Exposure Claims Present Common Issues, Satisfying Rule 23(a)(4).

1. *The Remedy of Medical Monitoring Presents Common Issues.*

The Court's Decision on Defendant's Motion to Compel Medical Records set forth the following elements of Plaintiffs' burden of proof for the remedy of medical monitoring:

- (1) exposure to PFOA;
- (2) for which the Defendant is liable under an accepted legal theory such as negligence or nuisance;
- (3) increased risks of injury or disease caused by the exposure; and
- (4) a monitoring program that differs from that provided to anyone who sees a doctor regularly, and is useful for early identification of injury associated with the exposure.

[Doc. 105, at 6].

Each of these elements presents common issues. Exposure to PFOA essentially equates to membership in the Exposure Class, demonstrated by residence in the Zone of Contamination, consumption of contaminated water, and an above-background level PFOA blood level. The Defendant's liability for negligence, nuisance, trespass, and strict liability presents a set of issues that are common to the class, as set forth in Sections I.B. and I.E. of this brief.

The increased risks of injury or disease caused by the exposure are common to all class members. [Ex. 4, and Ducatman Ex. 1, pp. 11 - 15; Doc. 91-3, ¶ 11]. These risks include altered liver function, immune suppression, abnormal uric acid, endocrine disruption, urogenital cancers, and high cholesterol, among other risks. [*Id.*]. Similarly, the availability and usefulness of a

¹¹ Representative Plaintiff Linda Crawford's well recently tested at 4.1 ppt PFOA, and her blood serum level of PFOA was 2.8 µ/l. [Ex. 46, ¶¶ 4 - 5].

specific and targeted medical monitoring program for the Exposure Class also presents common issues, as explained by Alan Ducatman, M.D.:

For residents of Bennington, Vermont, who have been exposed to PFOA through consumption of contaminated drinking water, the existence of their above-background levels of PFOA results in increased risks of the illnesses and adverse health conditions listed above. To a reasonable degree of medical certainty, a medical monitoring program is clinically necessary for this population to detect known PFOA-related adverse health effects as early as possible in order to minimize disease and improve health outcomes. The earlier these health conditions are detected, the more effectively they can be treated.

[Ex. 4; Doc. 91-3, ¶ 13].

Each of the elements of medical monitoring relief presents common issues of fact or law, and is subject to common proof among the proposed class. *See generally, Donovan v. Philip Morris USA, Inc.*, 268 F.R.D. 1, 12-22 (D. Mass. 2010) (extensive discussion of common proof of similar elements of medical monitoring remedy under Massachusetts law); *Donovan v. Philip Morris USA, Inc.*, No. 06-12234-DJC, 2012 WL 957633, at * 17-19 (affirming that medical monitoring is group remedy presenting common issues of proof); *Collins v. Olin Corp.*, 248 F.R.D. at 101-105 (discussing predominance of common issues in similar case of chemical contamination of property and groundwater); *Ysalva v. Hughes Aircraft Co.*, 845 F. Supp. 705, 712-13 (D. Ariz. 1993) (defendant's liability for hazardous waste contamination and plaintiffs' exposure presented common issues in case seeking medical monitoring); *Cook*, 151 F.R.D. at 385 (identifying common issues in contamination case seeking medical monitoring and other remedies); *Ouellette.*, 86 F.R.D. at 479 (addressing common questions and proof in case involving claims of negligence, nuisance, and trespass arising from air and water pollution).

2. *The Battery Claim Presents Common Issues.*

In Vermont, battery is an intentional act that results in harmful or offensive contact with another. *Christman v. Davis*. 2005 VT 119, ¶6, 179 Vt. 99, 101; *Restatement (Second) of Torts*

§18 (1965). Intent exists if the defendant knew, to a substantial certainty, that its conduct would bring about harm to “someone within a small class of potential victims within a localized area.” *Restatement (Third) of Torts*, Phys. & Emot. Harm § 1, cmt. e, at 8.

In this case, these elements are subject to common proof. The Defendant’s intent, demonstrated by its course of conduct over 30 years, its decades of air pollution, its repeated violations of its air permits, its knowledge of the toxicity of its chemicals, and the many hundreds of complaints from neighboring residents, present factual issues that are common to every class member. Similarly, the existence harmful or offensive contact is proven by the class members’ PFOA blood test results. Although these blood test results range from close to the national background average, up to 1,125 µg/l, this variation will affect only the issue of damages, rather than the Defendant’s liability for its battery of the Exposure Class.

D. Common Issues Predominate for the Exposure Class, Satisfying Rule 23(b)(3).

Predominance exists if issues subject to generalized proof are more substantial than the issues subject to individualized proof. *In re U.S. Foodservice Inc. Pricing Litigation*, 729 F. 3d 108, 118 (2d Cir. 2013). Common questions predominate when a “common nucleus of operative facts and issues” underpins the claims of the proposed class. *Nassau County*, 461 F. 3d at 228; *Allen*, 2012 WL 5844871, at * 9. The medical monitoring remedy and battery claim of the proposed Exposure Class meet these tests.

Common questions predominate concerning the remedy of medical monitoring, because its elements are subject to generalized proof and the prescribed program of medical monitoring is common to the class. [Ex. 4, and Ducatman Ex. 1, pp. 9 – 15; Doc. 91-3, ¶¶ 10 – 13]. The Defendant’s liability for common law torts, the increased risks that resulted from drinking the Defendant’s PFOA, and the program of tests needed to monitor this set of risks, all present common issues. Common questions predominate because there is common nucleus of operative

facts surrounding the Defendant's contamination of the Exposure Class' wells with PFOA, the exposure of the class members to this PFOA through drinking that contaminated water, and the resulting health risks and need for medical monitoring. *See Donovan*, 268 F.R.D. at 28-29 (holding that common issues predominated in warranty claim of case seeking medical monitoring under similar elements of Massachusetts law); *Donovan*, 2012 WL 957633, at * 20 (same); *Yslava*, 845 F. Supp. at 713 (common issues predominated in case seeking medical monitoring for exposure to contaminated groundwater); *Cook*, 151 F.R.D. at 388 (common issues predominated in claim for medical monitoring); *see also Leach v. E.I DuPont de Nemours and Co.*, No 01-C-608, at 23-27 (Circ. Ct. W.V. April 10, 2002) (in first case litigated over PFOA contamination of drinking water and seeking medical monitoring, and applying same requirements as federal rule 23, class action certified in part because "basic common issues of the defendant's liability and the common tortious conduct of the defendant that necessarily predominate over any individualized issue") (attached as Exhibit 48).¹²

To the extent that courts have refused to certify medical monitoring classes in PFOA cases, those decisions have turned on (1) individualized factual issues concerning the extent of the exposure of class members, issues that are absent from this case because the Exposure Class consists only of members whose serum PFOA levels exceed the background average, and (2) interpretations of other state's law that conflict with this Court's delineation of the elements of this remedy in this case. *See Rowe v. E.I. DuPont de Nemours and Co.*, 2008 WL 5412912 (D. N.J. Dec. 23, 2008) (denying class certification based on individualized issue of exposure due to the absence of blood serum testing for PFOA, and based on an interpretation of New Jersey law that required individualized proof of increased risks); *Rhodes v. E.I. DuPont de Nemours and*

¹² *Donovan* found that common issues did not predominate in the negligence claim due to individualized issues of comparative negligence that are not present in this case. 268 F.R.D. at 29.

Co., 253 F.R.D. 365 (S.D.W.V. 2008) (denying class certification based on individualized issue of exposure due to the absence of blood serum testing for PFOA, and based on interpretation of West Virginia law that required individualized proof of increased risks). Neither *Rowe* nor *Rhodes* is persuasive in light of their factual distinctions and differences in governing state law.

Likewise, common issues predominate concerning battery because the overarching issue in this claim is the Defendant's liability, which turns on proof of intent. This proof, consisting primarily of the Defendant's course of conduct over its three decades of generating the PFOA emissions that have contacted the Exposure Class, will be the same for all class members, and thus presents common issues subject to generalized proof. Further, it is well-established that individualized damages assessments do not defeat predominance, and the Second Circuit has endorsed the undertaking of individualized damages inquiries in class actions. *In re Visa /MasterMoney Antitrust Litigation*, 280 F. 3d 124, 139 (2d Cir. 2001); *Collins*, 248 F.R.D. at 105.

The evidence before the Court demonstrates that, for the Exposure Class and its claims for medical monitoring and battery, common issues predominate because these issues subject to generalized proof are more substantial than any issues subject to individualized proof.

E. A Class Action Is Superior For the Exposure Class.

A class action is superior for the Exposure Class for the same reasons that it is superior for the Property Class. The Exposure Class presents comparable efficiency and fairness based on the complex nature of the case, the breadth of Plaintiffs' allegations, the volume of evidence and witnesses, the need for expert testimony in specialized areas, and the sheer number of

participants. The four-factor test for superiority under Rule 23(b)(3)(A)-(D) strongly favors certification of the Exposure Class, as well as the Property Class.

F. The Court Also may Certify the Medical Monitoring Class Remedy Under Rule 23(b)(2).

Under Rule 23(b)(2), a class also may be certified where the party opposing the class has acted on grounds that apply generally to the class, so that final injunctive relief is appropriate respecting the class as a whole. Many courts have certified medical monitoring classes pursuant to this Rule because a court-administered medical monitoring program is injunctive relief. *E.g.*, *Donovan.*, No. 06-12234-DJC, 2012 WL 957633; *Donovan.*, 268 F.R.D. 1; *Arch v. Am. Tobacco Co., Inc.*, 175 F.R.D. 469 (E.D. Pa. 1997); *Gibbs v. E.I. DuPont de Nemours & Co.*, 876 F. Supp. 475 (W.D.N.Y. 1995); *Day v. NLO*, 851 F. Supp. 869 (S.D. Oh. 1994); *Yslava*, 845 F. Supp. 705.

In *Donovan*, the proposed medical monitoring program was injunctive relief because it would be managed by court-supervised agents, staffed with medical personnel, involve regular medical screenings, established procedures for intake, informed consent, and record keeping, and produce data for group studies. 268 F.R.D. at 22; *accord*, *In re NLO, Inc.*, 5 F.3d 154, 159 (6th Cir. 1993) (case law generally supports that medical monitoring is injunctive in nature). The medical monitoring program proposed for this Exposure Class includes these elements. [Ex. 4, and Ducatman Ex. 1, pp. 9 – 11; Doc. 91-3, ¶¶ 13 – 16]. Thus, this remedy is injunctive in nature.

In this case, as in *Donovan*, the proposed medical monitoring remedy meets the requirements for certification under Rule 23(b)(2) because the Defendant has acted on grounds generally applicable to the class, and injunctive relief is appropriate for the class as a whole because there is a group harm that a group injunctive remedy will correct. 268 F.R.D. at 12.

Accordingly, the Court may certify the medical monitoring remedy for the Exposure Class as injunctive relief pursuant to Rule 23(b)(2).

III. IN THE ALTERNATIVE, THE COURT SHOULD CERTIFY THE ISSUES OF THE DEFENDANT’S LIABILITY FOR CLASS TREATMENT PURSUANT TO RULE 23(C)(4).

Although Plaintiffs have met the requirements for certification of both proposed Classes under Rule 23(b)(3), in the alternative, Plaintiffs request that the Court certify the Classes under Rule 23(c)(4) for purposes of proving the common issues of the Defendant’s liability and the common damages and remedies. That Rule provides that, “[w]hen appropriate an action may be brought or maintained as a class action with respect to particular issues.” Fed. R. Civ. P. 23(c)(4); *see also Manual for Complex Litigation, Fourth*, § 21.24 (Federal Judicial Center, 2004) (this procedural device “may enable a court to achieve the economies of class action treatment for a portion of case, the rest of which may not qualify under Rule 23(a) or may be unmanageable as a class action.”).

The Second Circuit has adopted a liberal interpretation of this Rule, holding that “a court may employ Rule 23(c)(4)(A) to certify a class as to an issue regardless of whether the claim as a whole satisfies the predominance test” of Rule 23(b)(3). *Nassau County*, 461 F.3d at 221; *accord, Cordes & Co. Financial Services, Inc. v. A.G. Edwards & Sons, Inc.*, 502 F.3d 91, 108-09 (2d Cir. 2007) (applying *Nassau County* and directing district court to consider issue-specific class certification on remand); *see also Naparola v. Pella Corp.*, No. 2:14 mn-00001-DCN, 2016 WL 3125473, *13 (D.S.C., June 3, 2016), (characterizing *Nassau County* approach to Rule 23(c)(4) as “the emerging majority”).

“As the rule’s plain language and structure establish, a court must first identify the issues potentially appropriate for certification ‘and then’ apply the other provisions of the rule, *i.e.*,

subsection (b)(3) and its predominance analysis.” *Nassau County*, 461 F.3d at 226 (quoting *Gunnells v. Healthplan Serv., Inc.*, 348 F.3d 417, 439 (4th Cir. 2003); *see also Gunnells*, 348 F.3d at 439-441 (collecting cases certifying issues). Under *Nassau County*, when certifying a class with respect to particular issues under Rule 23(c)(4), a party needs “to satisfy . . . Rule 23(a) and (b) only with respect to those [] issues [].” 5 James Wm. Moore et al., *Moore’s Federal Practice* § 23.86[2] (3d ed. 2008); *see also Gunnells*, 348 F.3d at 439-41.

Pursuant to Rule 23(c)(4) and *Nassau County*, Plaintiffs alternatively request certification of the Classes for determination of common issues of the Defendant’s liability, damages under the GRA, and the remedy of medical monitoring, including the issues outlined in Sections I.B. and II.C of this brief. A single trial of these many common issues would promote efficiency and fairness for the Court and for all parties. Plainly, whether this case is viewed through the lens of Rule 23(b)(3) or Rule 23(c)(4), a single trial of these common issues would be far more efficient than multiple trials, and the Court should certify the proposed Classes because “Rule 23 seeks greater efficiency via collective adjudication and, relatedly, greater uniformity of decision as to similarly situated parties.” *Nassau County*, 461 F.3d at 228. Here, as in *Nassau County*, “class action management ‘problems pale in comparison to the burden on the courts that would result from trying the cases individually.’” *Id.*, quoting *In re Visa Check.*, 280 F.3d at 146.

CONCLUSION

The Court should certify the proposed Property Class and Exposure Class because these classes meet all requirements for certification under Rule 23. Alternatively, the Court should certify these classes for trial of the issues of liability pursuant to Rule 23(c)(4).

Respectfully submitted this 2nd day of October, 2017.

s/Emily J. Joselson

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CERTIFICATE OF SERVICE

I hereby certify that this 2nd day of October, 2017, I have served the foregoing document on Defendant by emailing a true and exact copy to Defendant's counsel as follows:

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